

Please replace the Abstract, with the following rewritten Abstract:

The present invention is based on the findings that BACE2, a homolog of β -secretase BACE, is able to stimulate processing of APP in a non-amyloidogenic pathway, thereby suppressing the level of A β . Accordingly, the present invention provides methods and means for the identification and use of modulators of this unique activity of BACE2 to suppress A β production. The compounds identified using the methods and means provided herein may be used as potential candidates for the treatment of Alzheimer's disease and other neurological diseases by reducing β -amyloid deposit formation.